

## Arash method and uncontrollable data in DEA

### Abstract

The uncontrollable data such as environmental variables are a kind of data which cannot be controlled by managers or users, but they may affect in assessing the performance evaluation of decision making units (DMU). In this paper, the Arash Method (AM) is improved to assess the efficiency scores of DMUs which have some uncontrollable data. Moreover, the paper illustrates how it would be possible to examine the effects of uncontrollable data to find the efficient DMUs among the technical efficient ones and also arrange both inefficient and technical efficient DMUs at the same time. A numerical example is also considered to depict the validity and capabilities of the proposed extension Arash Method.